OPTIMUM®
MASCHINEN - GERMANY

Operating Manual

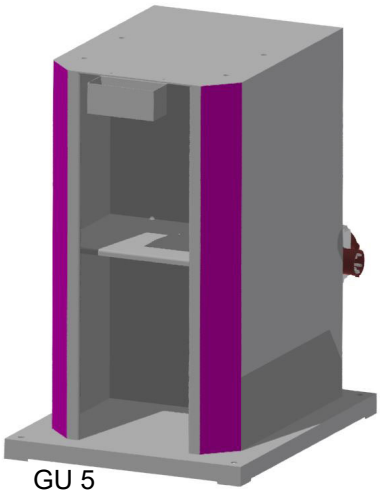
Extraction unit

Version 1.0.1

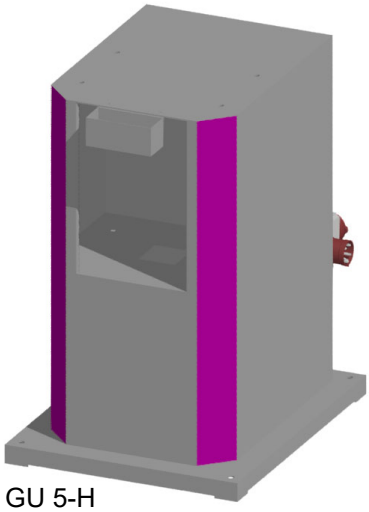
OPTIgrind®

GU 5 Item no. 3107114

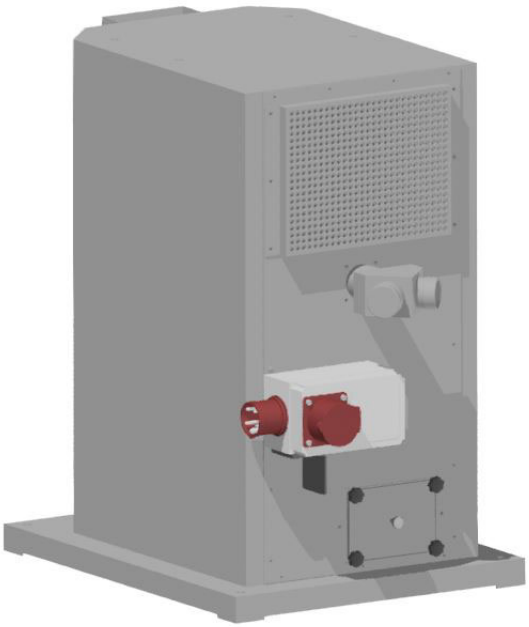
GU 5 - H Item no. 3107124



GU 5



GU 5-H



EN

1 Table of contents

1 Safety
1.1 Safety instructions (warning notes) ... 4
1.1.1 Classification of hazards ... 4
1.1.2 Other pictograms ... 5
1.2 Intended use ... 5
1.3 Reasonably foreseeable misuse ... 7
1.3.1 Avoiding misuse ... 7
1.3.2 Workplace limits ... 7
1.3.3 Residual risk ... 7
1.4 Electronics ... 7
1.5 Inspection deadlines ... 8

2 Technical specification
2.1 Dimensions GU5 | GU5-H ... 10

3 Delivery, interdepartmental transport, unpacking
3.1 Delivery ... 11
3.2 Interdepartmental transport ... 11
3.3 Unpacking ... 11
3.4 Commissioning ... 11

4 Operation
4.1 Extraction unit function description ... 12
4.2 Functional Description of the Electrical Connections ... 12
4.3 General information ... 12
4.4 Fire and Explosion Prevention ... 13

5 Maintenance
5.1 Inspection and maintenance ... 14

6 Malfunctions

7 Appendix
7.1 Copyright ... 15
7.2 Liability claims/warranty ... 15
7.3 Advice for disposal / Options of reuse: ... 16
7.4 Dismantling, disassembling, packing and loading ... 16
7.4.1 Decommissioning ... 16
7.4.2 Dismantling ... 16
7.5 Disposal of new device packaging ... 16

8 Ersatzteile - Spare parts
8.1 Ersatzteilbestellung - Ordering spare parts ... 17
8.2 Elektrische Ersatzteile - Electrical spare parts ... 17
8.2.1 Schaltplan - Wiring diagram ... 17
8.3 GU 5 | GU 5-H ... 17
8.4 Schaltplan Stromverteiler - Wiring diagram power distribution ... 19

GU5_GU5-H_GBIVZ.fm

Preface

Dear customer,

Thank you very much for purchasing a product made by OPTIMUM.

OPTIMUM metal working machines offer a maximum of quality, technically optimum solutions and convince by an outstanding price performance ratio. Continuous enhancements and product innovations guarantee state-of-the-art products and safety at any time.

Before commissioning the machine please thoroughly read these operating instructions and get familiar with the machine. Please also make sure that all persons operating the machine have read and understood the operating instructions beforehand.
Keep these operating instructions in a safe place nearby the machine.

Information

The operating instructions include indications for safety-relevant and proper installation, operation and maintenanceof the machine. The continuous observance of all notes included in this manual guarantee the safety of persons and of the machine.

The manual determines the intended use of the machine and includes all necessary information for its economic operation as well as its long service life.

In the paragraph "Maintenance" all maintenance works and functional tests are described which the operator must perform in regular intervals.

The illustration and information included in the present manual can possibly deviate from the current state of construction of your machine. Being the manufacturer we are continuously seeking for improvements and renewal of the products. Therefore, changes might be performed without prior notice. The illustrations of the machine may be different from the illustrations in these instructions with regard to a few details. However, this does not have any influence on the operability of the machine.
Therefore, no claims may be derived from the indications and descriptions. Changes and errors are reserved!

Your suggestion with regard to these operating instructions are an important contribution to optimising our work which we offer to our customers. For any questions or suggestions for improvement, please do not hesitate to contact our service department.

If you have any further questions after reading these operating instructions and you are not able to solve your problem with a help of these operating instructions, please contact your specialised dealer or directly the company OPTIMUM.

Optimum Maschinen Germany GmbH
Dr.- Robert - Pfleger - Str. 26
D-96103 Hallstadt
Fax (+49)0951 / 96555 - 888
email: info@optimum-maschinen.de
Internet: www.optimum-machines.com

1 Safety

Glossary of symbols

☞	provides further instructions
➜	calls on you to act
❍	listings

- ❍ explains the meaning and use of the warning notes included in these operating instructions,
- ❍ defines the intended use of the extraction unit,
- ❍ points out the dangers that might arise for you or others if these instructions are not observed,
- ❍ informs you about how to avoid dangers.

In addition to these operating instructions, please observe

- ❍ the applicable laws and regulations,
- ❍ the statutory provisions for accident prevention,
- ❍ the prohibition, warning and mandatory signs as well as the warning notes on the extraction unit.

When installing, operating, maintaining and repairing the extraction unit, the relevant standards must be observed.

If European standards have not yet been incorporated in the national legislation of the country in question, the specific applicable regulations of each country must be observed.

If necessary, relevant measures must be taken to comply with national regulations before commissioning the extraction unit.

Always keep this documentation close to the extraction unit.

INFORMATION

If you are unable to rectify an issue using these operating instructions, please contact us for advice:

Optimum Maschinen Germany GmbH
Dr.-Robert-Pfleger-Str. 26

D-96103 Hallstadt

Email: info@optimum-maschinen.de

1.1 Safety instructions (warning notes)

1.1.1 Classification of hazards

We classify the safety warnings into different categories. The table below gives an overview of the classification of symbols (ideogram) and the warning signs for each specific danger and its (possible) consequences.

Symbol	Alarm expression	Definition / consequence
	DANGER!	Impending danger that will cause serious injury or death to people.
	WARNING!	A danger that can cause serious injury or death.
	CAUTION!	A danger or unsafe procedure that can cause personal injury or damage to property.

Symbol	Alarm expression	Definition / consequence
	ATTENTION!	Situation that could cause damage to the machine and product, as well as other types of damage. No risk of injury to persons.
	INFORMATION	Practical tips and other important or useful information and notes. No dangerous or harmful consequences for people or objects.

In case of specific dangers, we replace the pictogram with

general danger

with a warning of

injury to hands,

hazardous electrical voltage,

or

rotating parts.

1.1.2 Other pictograms

Warning: automatic start-up!

Warning: tilting danger!

Warning: suspended loads!

Caution, danger of explosive substances!

Prohibited: do not extract and ignition sources!

Read the operating instructions before commissioning!

Pull out the mains plug!

Wear protective gloves!

Wear safety shoes!

Wear a protective suit!

Contact address

1.2 Intended use

WARNING!

In the event of improper use, the extraction unit

- **will endanger personnel,**
- **the extraction unit and other property of the operating company and**
- **the functionality of the extraction unit may be compromised.**

The extraction with blower and cyclone separator has been designed and built for the extraction of air pollutant substances on manually operated machines for tools with geometrically non-determined blade.

It is forbidden to use the extraction unit when machining with non-water-soluble or water-soluble cooling lubricants. The device is not suitable for the extraction of mixtures of combustible dusts with fluids.

The extraction unit must only be installed and operated in a dry and well-ventilated areas.

The defined conditions of use and performance data must not be changed.

The extraction unit must neither be renovated nor modified in any other way.

Dust category L

(Low risk according to the definition of standard EN 60335-2-69). According to the EN standard, the extraction unit is approved for dust category L and thus, for the extraction of dry, non-combustible and dust hazardous to health with occupational exposure limit values (German AGW) of > 1mg/m³. The clean air is emitted back to the location.

Dust category M

(Medium risk according to the definition of standard EN 60335-2-69). The extraction unit is suitable for the extraction of dry, non-flammable dust hazardous to health where the occupational exposure limit value is higher than 0.1 mg/m³.

Dust category H

(High risk according to the definition of standard EN 60335-2-69). The extraction unit is suitable for the extraction of dry, non-flammable dust hazardous to health for all occupational exposure limit values as well as for non-flammable dust with carcinogenic substances. The clean air is emitted back to the location.

Use in dust areas with potentially explosive atmosphere (Type 22)

Safety-related, extraction units with the supplement "Type 22“ are suitable for extracting flammable, dry non-electrically conductive dusts in Zone 22. Exceptions are dusts with extremely low minimum ignition energy (MIE < 1mJ). Use with these dusts requires a case-related safety assessment and, where applicable. further measures.

Safety-related, the extraction unit is not suitable for extracting potentially explosive substances in line with §1 Explosives Act. Do not extract hot gases, ignition sources of any type, sparks generated mechanically or electrostatically charged materials.

If the extraction unit is used other than as specified above, without the permission of the company Optimum Maschinen Germany GmbH, the machine is no longer used properly.

We will not be held liable for any damages resulting from any operation which is not in accordance with the intended use.

We expressly point out that the guarantee will expire, if any constructive, technical or procedural changes are not performed by the company Optimum Maschinen Germany GmbH. It is also part of the intended use that you

- observe the limits of the extraction unit,
- the assembly instruction is observed,
- the inspection and maintenance instructions are observed.

☞ Technical specification on page 9

CAUTION!

Extremely severe injuries due to non-intended use.

Conversions and modifications of the operating values of the extraction uit are forbidden. They could pose an accident hazard to persons and cause damage to the extraction unit.

1.3 Reasonably foreseeable misuse

The extraction unit has been designed as add-on device, fixing of machines on the surface is not permissible.

Any use other than that specified under "Intended use" or any use beyond that described will be deemed non-intended use and is not permissible.

Any other use must be discussed with the manufacturer.

1.3.1 Avoiding misuse

When commissioning the extraction unit, the efficiency must be checked. This includes a check of the device parameters and the measurement of the hazardous substance pollution of air at the work place. For particulate hazardous substances, the inspection of the device must be repeated annually. For pure gaseous substances, the Ordinance on Hazardous Substances requires an inspection every three years.

The extraction unit may only be operated using electrically conductive extraction hose and accessories.

1.3.2 Workplace limits

During activities on material-removing machines, amongst others, the general dust limit value with regard to release of aluminium, aluminium hydroxide, aluminium oxide (except for aluminium oxide fumes). iron (II) oxide, iron (II) oxide, graphite and magnesium oxide (except for magnesium oxide fumes) must be considered according to TRGS 900. The limit value for the alveolar fraction is 3 mg/m^3 and for the inhalable fraction, 10 mg/m^3.

If there is a possibility that potentially toxic, highly toxic, carcinogenic, mutagenic or reprotoxic substances are released, further protective measures are necessary according to §10 of the German Ordinance on Hazardous Substances (Gefahrstoffverordnung, GefStoffV). In event of reprotoxic substances, the maternity protection and parental leave ordinance (German MuSchEltZV) must be observed.

Further requirements and information for ventilation of work places can also be found in the

- German Occupational Safety Act,
- Factory Safety Act,
- ninth ordinance for the Device Safety Act (machine ordinance - 9 GSGV),
- Ordinance on working premises

as well as

- other national health and safety regulations, accident prevention regulations and generally accepted rules of engineering.

1.3.3 Residual risk

When observing the operating instructions and the work processes listed therein, as well as when observing the applicable safety guidelines by the operating personnel, it is assumed that in normal operation that the extraction unit cannot pose a risk.

However, when extracting different substances it cannot be ruled out that these substances cannot lead to an unforeseeable chemical reaction between each other.

- If potentially explosive dusts are extracted, no ignition sources may be sucked in.

1.4 Electronics

Have the extraction unit checked at regular intervals. Immediately eliminate all defects such as loose connections, defective wires, etc.

A second person must be present during work on live components to disconnect the power in the event of an emergency. Disconnect the extraction unit immediately if there is a malfunction in the power supply!

Comply with the required inspection intervals in accordance with the factory safety directive, operating equipment inspection.

The operator of the extraction unit must ensure that the electrical systems and operating equipment are inspected with regards to their proper condition, namely,

- by a qualified electrician or under the supervision and direction of a qualified electrician, prior to initial commissioning and after modifications or repairs, prior to recommissioning
- and at set intervals.

The intervals must be set so that foreseeable defects can be detected in a timely manner, when they occur.

The relevant electro-technical rules must be followed during the inspection.

No check is required before first commissioning, if the manufacturer or installer has confirmed to the operator that the electrical system and operating materials have been procured in accordance with the stipulations of the accident prevention regulations.

Permanently installed electrical systems and operating materials are considered constantly monitored if they are continually serviced by qualified electricians and inspected by means of measurements during operation (e.g. monitoring the insulation resistance).

1.5 Inspection deadlines

Define and document the inspection deadlines for the extraction unit in accordance with § 3 of the Factory Safety Act and perform an operational risk analysis in accordance with § 6 of the Work Safety Act. Use the test intervals specified in the inspection and maintenance as reference value. ☞ Inspection and maintenance on page 14.

Ambient air, hazardous substance pollution

- annually, local measurements for particulate hazardous substances.
- every 3 years, local measurements for pure gaseous substances.

2 Technical specification

The following information represents the dimensions and indications of weight and the manufacturer's approved machine data.

GU5 | GU5-H

Electrical connection	400V ~ 50Hz (~60Hz) CEE 16 A connector, 5-pin supply voltage required.
max. input power of the machine connected at the three-phase connector	4 kW
Load current of the machine connected, minimum	0.5 A
Filter class	L
Blower engine power	1.3 kW
Number of blower fans	1
Blower speed [rpm]	29,000 / ~50Hz (34,800 / ~60Hz)
Max. air throughput	2.3 m^3 per minute
Dust container volume	1.8 litres
Exhaust air filter surface Filament fine filter	0.06 m^2
Weight of the device	50 kg
Dimensions	☞ Dimensions GU5 | GU5-H on page 10
Environmental conditions	can be used at temperatures between 5° and 40° and up to 65 % relative humidity. A high reduce humidity reduces the extraction performance of the device.

Emission measurement

The A-evaluated sound pressure level emission L_{pA} is 89 to 92 dB. The A-evaluated sound power level L_{WA} is 104 to 107 dB.

CAUTION!

The operator must wear sound and hearing protection.

INFORMATION

This numerical value was measured on a new extraction unit under the operating conditions specified by the manufacturer. The noise behaviour of the device might change depending on the age and wear of the device.

Furthermore, the noise emission also depends on production engineering factors, e.g. speed, material and clamping conditions.

INFORMATION

The mentioned numerical value is the emission level.

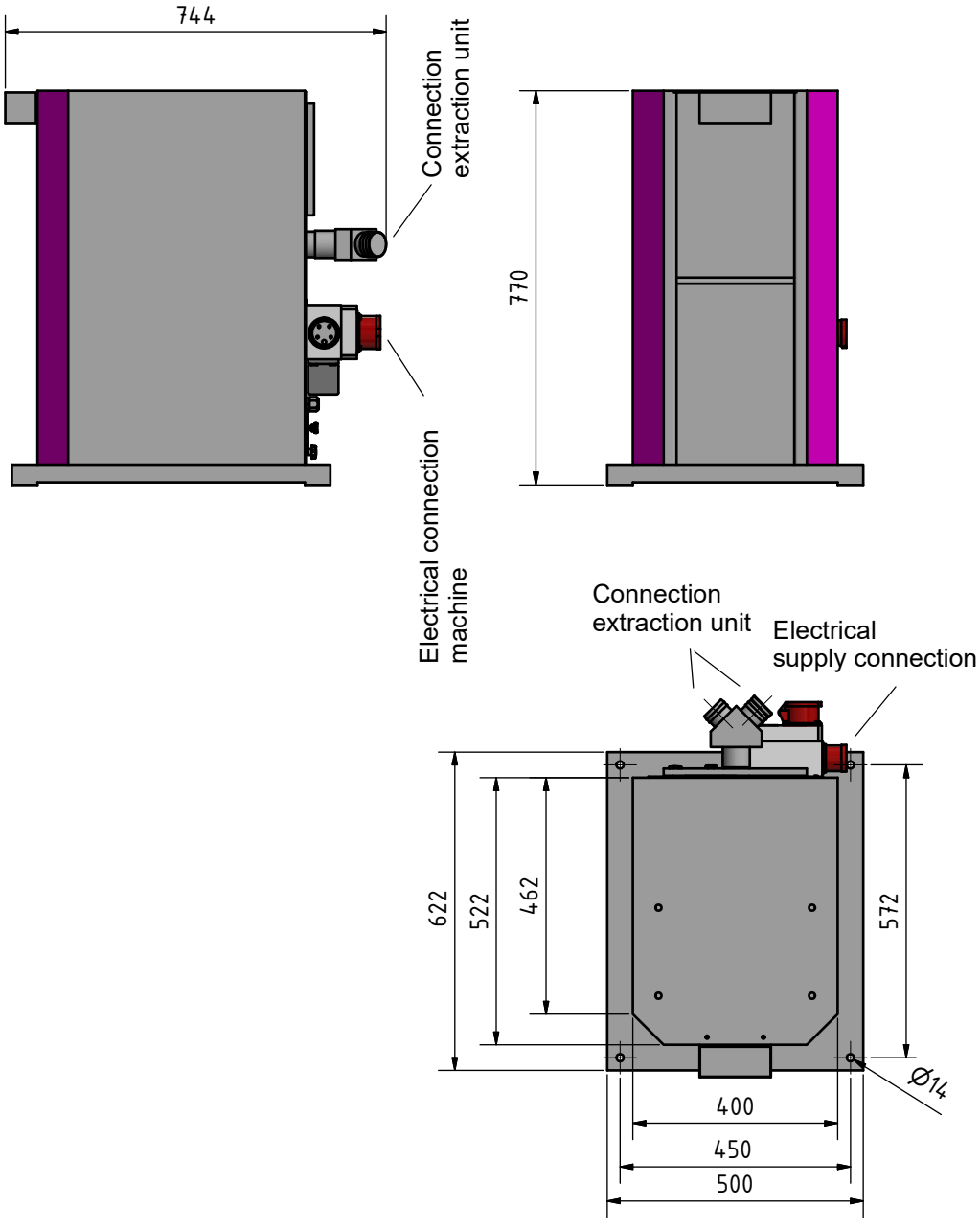
Though there is a dependency between the degree of the noise emission and the degree of the noise disturbance it is not possible to use it reliably to determine if further precaution measures are required or not.

The following factors influence the actual degree of the noise exposure of the operator:

- Characteristics of the working area, e.g. size or damping behaviour,
- other noise sources, e.g. the number of machines,
- other processes taking place in proximity and the period of time, during which the operator is exposed to the noise.

Furthermore, it is possible that the admissible exposure level might be different from country to country due to national regulations.
This information about the noise emission should, however, allow the operator of the device to more easily evaluate the hazards and risks.

2.1 Dimensions GU5 | GU5-H



GU5_GU5-H_GB_2.fm

3 Delivery, interdepartmental transport, unpacking

INFORMATION

The extraction unit is mounted fully assembled. It is delivered in a transport box. The GU5-H machine base can be filled with concrete (DIY store Ready-dry concrete to mix) in the lower area by the operator in order to achieve sufficient rigidity.

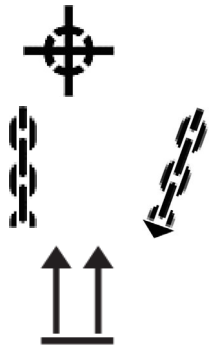
3.1 Delivery

Check the status of the extraction unit immediately upon receipt and claim possible damages at the last carrier also if the packing is not being damaged. In order to ensure claims towards the freight carrier we recommend you to leave the machines, devices and packing material for the time being in the status at which you have determined the damage or to take photos of this status. Please inform us about any other claims within six days after receipt of delivery.

Check if all parts are firmly seated.

3.2 Interdepartmental transport

- Centres of gravity
- Load suspension points
  (Marking of the positions for the load suspension gear)
- Prescribed transport position
  (Marking of the top surface)
- Means of transport to be used
- Weights



WARNING!

Severe or fatal injuries may occur if parts of the machine tumble or fall down from the forklift truck or from the transport vehicle. Follow the instructions and information on the transport box.

3.3 Unpacking

Install the extraction unit close to its final position before unpacking. If the packaging shows signs of having possibly been damaged during transport, take the appropriate precautions to prevent the extraction unit being damaged when unpacking. If damage is discovered, the carrier and/or shipper must be notified immediately so the necessary steps can be taken to register a complaint.

Examine the complete extraction unit carefully and check whether all materials, such as shipping documents, instructions and accessories have been delivered with the extraction unit.

3.4 Commissioning

During the connection of several hoses at the extraction ports, it must be ensured that a leakage resistance of 10^6 Ohm is not exceeded.

The electric supply connection must be equipped with a neutral conductor.

4 Operation

4.1 Extraction unit function description

In the machine substructure is situated a fan than generates an underpressure. The negative pressure produced draws in the ambient air. The air volume from the extraction connections is guided via a cyclone separator that extracts the fine dust particles from the extracted air and deposits them in a collection tank. The exhaust air cleaned is guided back to the outside via a filter.

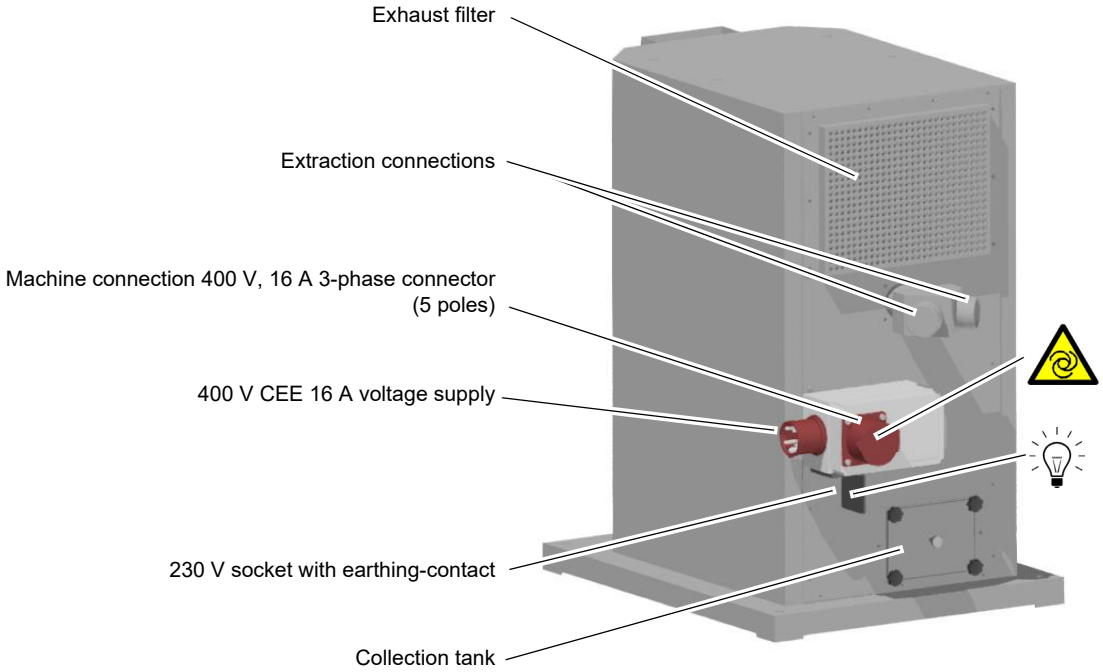
4.2 Functional Description of the Electrical Connections

The 400 V 3-phase current socket located on the rear side is used for connecting devices and machines. The 400 v socket serves as an identification signal for switching on the blower fan. The blower fans start with a short delay as soon as the machine connected there is switched on. The blower fans switch off as soon as machine or device connected to the 400 V socket is switched off.

INFORMATION

The blower fans switch on only when the possible extension cable used or the 400 V socket have also been carried out 5-pin for connecting the GU5, thus including neutral conductor. The load signal must be at least 0.5 A.

The blower only switches on in conjunction with inverter drive (Vario grinding machines) if the speed is first set to high speed when the grinding machine is switched on in order to exceed the 0.5 A detection signal for switching on the blower.


Exhaust filter
Extraction connections
Machine connection 400 V, 16 A 3-phase connector (5 poles)
400 V CEE 16 A voltage supply
230 V socket with earthing-contact
Collection tank

4.3 General information

Wear appropriate work clothing. After working with toxic dusts, this must be considered as contamination and has to be decontaminated accordingly or disposed of correctly. Ask your employer for the currently applicable safety guidelines and special measures in order to guarantee your own safety.

The area in which maintenance work (normal and exceptional) are carried out must always be kept clean and dry. Repair work may only be carried out after the device has been switched off and the power supply has been interrupted.

Repair work must only be carried out by specialist personnel.

The machine may not be installed or operated in rain or in water.

Do not insert any objects into the openings. Do not use the device in an opening is blocked. Keep the openings free of dust, fibres, hair and other materials that could limit the air flow. Keep hair. loose clothing, fingers and other body parts away from the openings and moving parts of the device.

Do not use the device if the power cable or connector are damaged.

The power cable must be checked for damage at regular intervals, such as crack formation or ageing. In case damage is determined, the line must be replaced before further use.

4.4 Fire and Explosion Prevention

Flammable material dust is considered as potentially explosive from a particle size smaller than 500 µm.

Swirled up deposited flammable dust may lead to a potentially explosive atmosphere in tool machines and separator units. This must be observed in particular with light alloy metal dusts such as aluminium and magnesium.

The GU5 extraction unit has not been designed to extract a potentially explosive atmosphere in the working area of a machine.

5 Maintenance

5.1 Inspection and maintenance

The type and level of wear depends to a large extent on the individual usage and operating conditions. Any indicated intervals therefore are only valid for the corresponding approved conditions.

Maintenance work must be carried out in a room with filtered forced ventilation.

Interval	Where?	What?	How?
Start of work, after every maintenance or repair work after empirical values on the part of the operator	**Collection tank**	Emptying	➜ Empty the collection tank regularly.
If the suction performance reduces. after empirical values on the part of the operator	**Exhaust air**	Cleaning Replacing	➜ Wash the exhaust air filter with water, dry and reinsert. ➜ If necessary, replace the exhaust air filter.
after empirical values on the part of the operator	**Cyclone separator**	Check Cleaning	➜ Checks should be carried out at regular intervals if particles have deposited inside the device, e.g. in the cyclone separator. These must be removed.
Annually	**Ambient air**	Hazardous substances exposure	➜ Local measurements for particulate hazardous substances.
every 3 years			➜ Local measurements for pure gaseous substances.

6 Malfunctions

Malfunction	Cause/ possible effects	Solution
Do not switch on the blower fans.	• Incorrect socket used. • Neutral conductor N not present	• Use a 5-pin 3-phase current - Use an extension cable. • 400 V power supply cable not executed as 5-pin.

GU5_GU5-H_GB_5.fm

7 Appendix

7.1 Copyright

This document is protected by copyright. All derived rights are reserved, especially those of translation, re-printing, use of figures, broadcast, reproduction by photo-mechanical or similar means and recording in data processing systems, either partial or total.

Subject to technical changes without notice.

7.2 Liability claims/warranty

Besides the legal liability claims for defects of the customer towards the seller, the manufacturer of the product, OPTIMUM GmbH, Robert-Pfleger-Straße 26, D-96103 Hallstadt, does not grant any further warranties unless they are listed below or were promised as part of a single contractual provision.

Liability or warranty claims are processed at OPTIMUM GmbH's discretion either directly or through one of its dealers.
Any defective products or components of such products will either be repaired or replaced by components which are free from defects. Title to replaced products or components is transferred to OPTIMUM Maschinen Germany GmbH.

The automatically generated original proof of purchase which shows the date of purchase, the type of machine and the serial number, if applicable, is the precondition in order to assert liability or warranty claims. If the original proof of purchase is not presented, we are not able to perform any services.

Defects resulting from the following circumstances are excluded from liability and warranty claims:

- Use of the product beyond the technological capability and intended use, in particular due to overloading of the machine.
- Damage caused personally through incorrect use or failure to observe our assembly instruction,
- negligent or incorrect handling and use of improper operating materials.
- Unauthorized modifications and repairs.
- Insufficient installation and safeguarding of the machine.
- Disregarding the installation requirements and conditions of use.
- Atmospheric discharges, overvoltage and lightning strokes as well as chemical influences.

Neither are the following items covered by liability or warranty claims:

- Wearing parts and components which are subject to normal and intended wear, such as V-belts, ball bearings, lighting, filters, seals, etc.
- Non reproducible software errors

Any services, which OPTIMUM GmbH or one of its agents performs in order to fulfil any additional warranty are neither an acceptance of the defects nor an acceptance of its obligation to compensate. These services neither delay nor interrupt the warranty period.

The court of jurisdiction for legal disputes between businessmen is Bamberg.

If any of the aforementioned agreements is totally or partially inoperative and/or invalid, a provision which nearest approaches the intent of the guarantor and remains within the framework of the limits of liability and warranty which are specified by this contract is deemed agreed.

7.3 Advice for disposal / Options of reuse:

Please dispose of your equipment in an environmentally friendly manner, by not placing waste in the environment but in a professional manner.

Please do not simply throw away the packaging and later the disused machine, but dispose of both in accordance with the guidelines laid down by your city council/local authority or by an authorised disposal company.

7.4 Dismantling, disassembling, packing and loading

INFORMATION

Please take care in your interest and in the interest of the environment that all component parts of the extraction unit are only disposed of in the intended and admitted way.

Please note that the electrical devices comprise a variety of reusable materials as well as environmentally hazardous components. Please ensure that these components are disposed of separately and professionally. In case of doubt, please contact your municipal waste management. If appropriate, call on the help of a specialist waste disposal company for the treatment of the material.

Please make sure that electrical components are disposed of professionally and in accordance with the statutory provisions.

The extraction unit contains electrical and electronic components and must not be disposed of as household waste. According to the European directive 2011/65/EG regarding disused electrical and electronic devices and the implementation in national law, disused electrical tools and electrical equipment must be stored separately and recycled in an environmentally friendly manner.

As the machine operator, you should obtain information regarding the authorised collection or disposal system which applies for your company.

7.4.1 Decommissioning

CAUTION!

Disused equipment must be decommissioned in a professional manner in order to avoid later misuse and danger the environment or persons.

- **Disassemble the machine if required into easy-to-handle and reusable assemblies and component parts.**
- **Dispose of machine components and operating fluids using the intended disposal methods.**

7.4.2 Dismantling

➜ Dismantle the connection cable or sever the connection cable.

7.5 Disposal of new device packaging

All used packaging materials and packaging aids from the machine are recyclable and generally need to be supplied to the material reuse.

The packaging wood can be supplied to the disposal or the reuse.

Any packaging components made of cardboard box can be chopped up and supplied to the waste paper collection.

The films are made of polyethylene (PE) and the cushion parts are made of polystyrene (PS). These materials can be reused after reconditioning if they are passed to a collection station or to the appropriate waste management enterprise.

Only forward the packaging materials correctly sorted to allow direct reuse.

8 Ersatzteile - Spare parts

8.1 Ersatzteilbestellung - *Ordering spare parts*

Bitte geben Sie folgendes an - *Please indicate the following :*

- Seriennummer - *Serial No.*
- Maschinenbezeichnung - *Machines name*
- Herstellungsdatum - *Date of manufacture*
- Artikelnummer - *Article no.*

Die Artikelnummer befindet sich in der Ersatzteilliste. *The article no. is located in the spare parts list.*

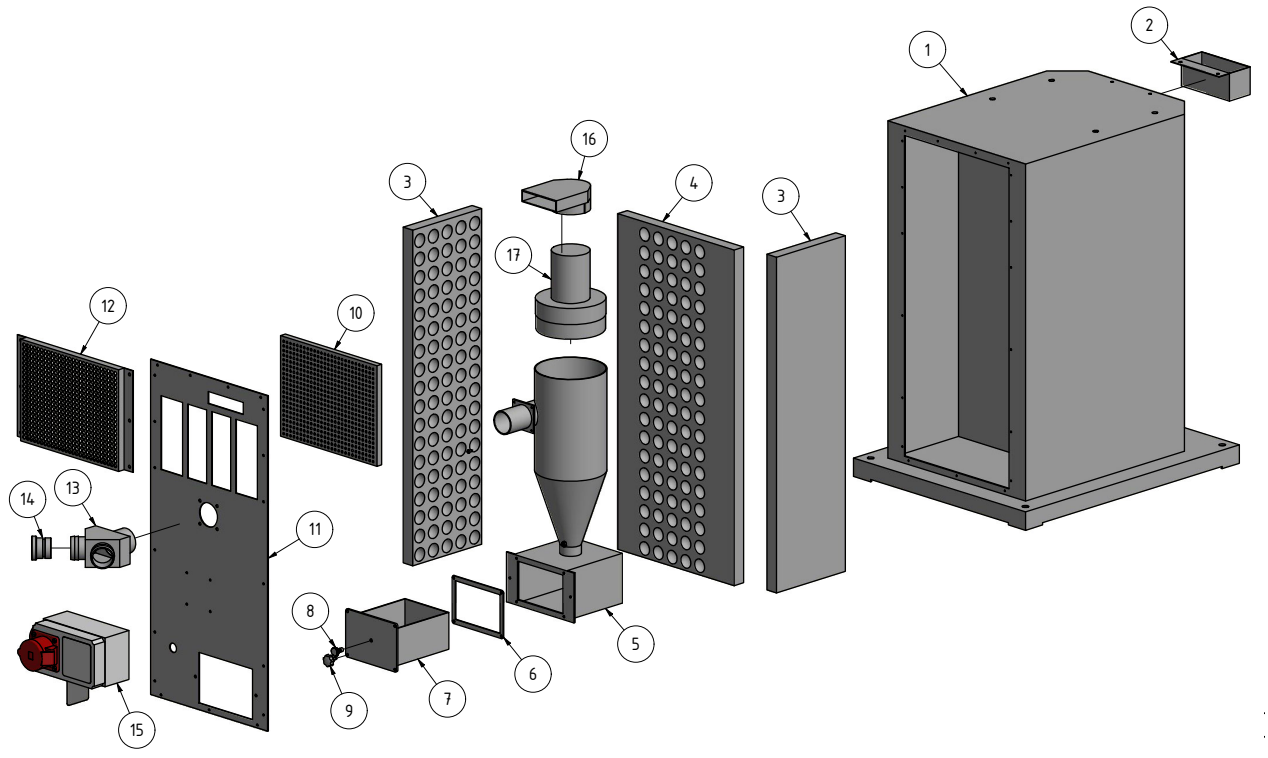
Die Seriennummer befindet sich am Typenschild. *The serial no. is on the type plate.*

8.2 Elektrische Ersatzteile - Electrical spare parts

8.2.1 Schaltplan - Wiring diagram

Der aktuelle Schaltplan mit Ersatzteilliste befindet sich im Schaltschrank der Maschine oder befindet sich als gedruckte Kopie in dieser Anleitung.
The current circuit diagram and spare parts list is located in the control cabinet of the machine or is located as printed paper in this manual.

8.3 GU 5 | GU 5-H

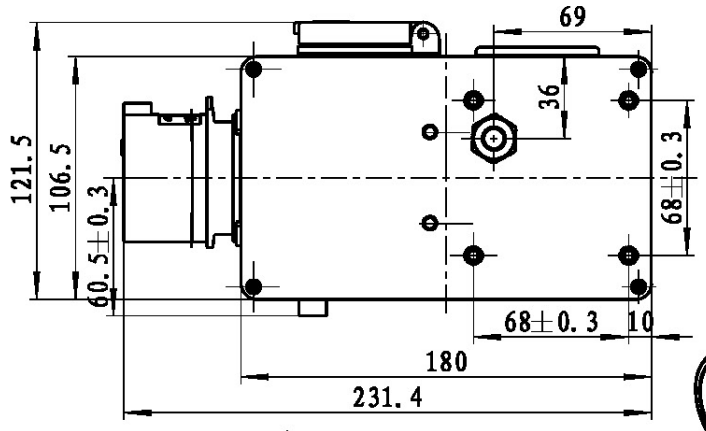


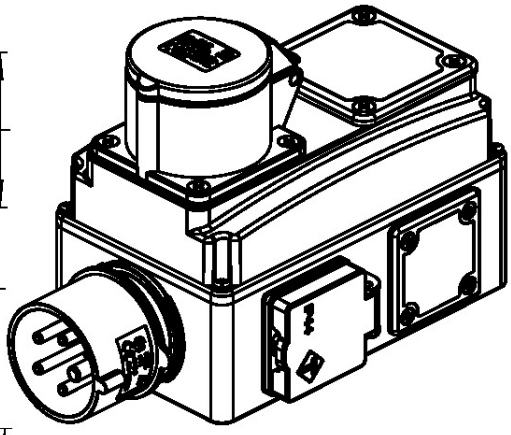
Ersatzteileliste GU 5 | GU 5-H - Spare parts list GU 5 | GU 5-H				
Pos.	**Bezeichnung**	**Description**	**Menge Qty.**	**Artikelnummer Item no.**
1	Unterbau GU5	Substructure GU5	1	0310711401
1	Unterbau GU5-H	Substructure GU5-H	1	0310712401
2	Wasserbehälter	Water container	1	0310711402
3	Isolierung	Insulation	2	0310711403
4	Isolierung	Insulation	1	0310711404
5	Zyklonabsaugung	Cyclone suction	1	0310711405
6	Dichtung	Seal	1	0310711406

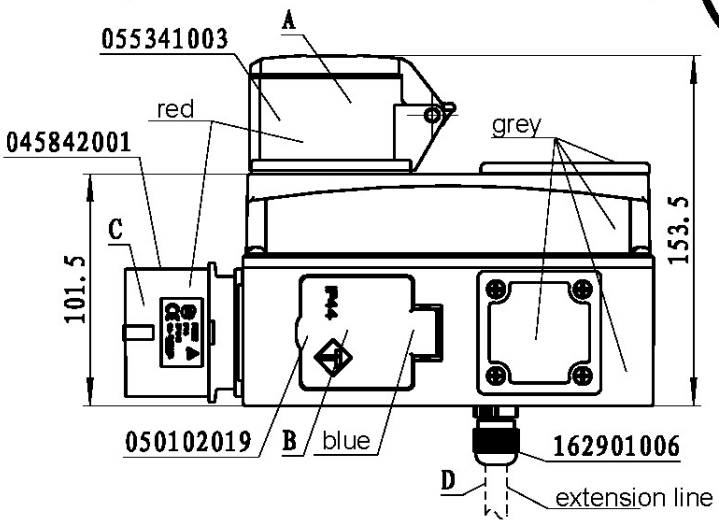
GU5_GU5_GU5-H_parts.fm

Ersatzteileliste GU 5 | GU 5-H - Spare parts list GU 5 | GU 5-H				
Pos.	**Bezeichnung**	**Description**	**Menge Qty.**	**Artikelnummer Item no.**
7	Behälter	Vessel	1	0310711407
8	Knopf	Knob	1	0310711408
9	Verschlussschraube	Locking screw	4	0310711409
10	Filter	Filter	1	0310711410
11	Abdeckung	Cover	1	0310711411
12	Abdeckung	Cover	1	0310711412
13	Verteiler	Distributor	1	0310711413
14	Stopfen	Plug	1	0310711414
15	Stromverteiler	Power distributor	1	0310711415
16	Anschluss	Connection	1	0310711104
17	Motor	Motor	1	03107110SM

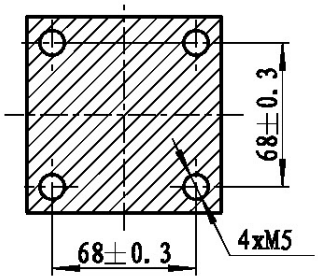
8.4 Schaltplan Stromverteiler - Wiring diagram power distribution



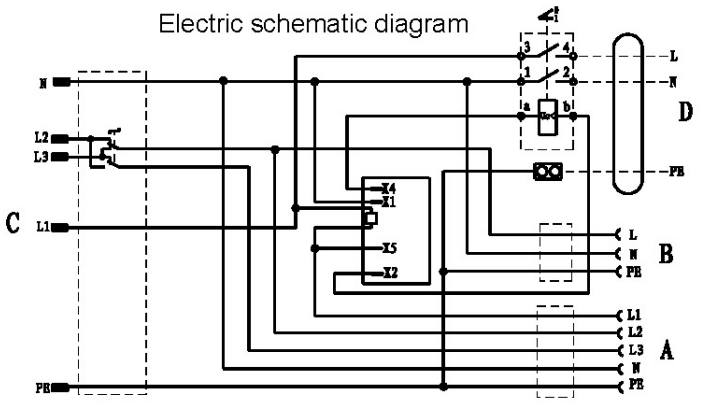




Mounting dimension



Electric schematic diagram



Technical specification

1. Standard: EN60309, EN61058;
2. additional used 055341003+045842001+050102019+020304006+103301002+162901006;
3. Electric parameter

Ie=16A Ue=400V~ CEE=3P+N+E;
AC3=4KW Uc=230V~50HZ;

When the A load current is greater than 0.5A , the lead line D lags behind A by 2-4 seconds. When the A load current is disconnected, the lead line D is delayed by 3-5 seconds from A, an there is no output voltage.
No matter how much current output B has, the lead line D cannot have voltage.

4. Protection level: IP 44

Anschlüsse - Connections

- A - Anschluss Schleifmaschine - Grinding machine connection - CEE 400V 16A
- B - 230V Schutzkontaktsteckdose - 230 V socket with earthing-contact
- C - Versorgungsanschluss Absaugung - Supply connection for extraction unit - CEE 400V 16A
- D - Versorgungsanschluss Gebläse - Supply connection for blower

OPTIMUM®
MASCHINEN - GERMANY

EC Declaration of Conformity

according to Machinery Regulation 2023/1230 Annex V Part A

The manufacturer / distributor Optimum Maschinen Germany GmbH
Dr.-Robert-Pfleger-Str. 26
D - 96103 Hallstadt, Germany

hereby declares that the following product

Product designation: Extraction unit

Type designation: GU 5 | GU 5-H

fulfils all the relevant provisions of the Machinery Regulation specified above and the additionally applied directives (in the following) - including the changes which applied at the time of the declaration.

Description:

Extraction of air pollutant substances on manually operated clamping machines for tools with geometrically non-determined blade.

The following additional EU Directives have been applied:

EMC Directive 2014/30/EU ; Restriction of the use of certain hazardous substances in electrical and electronic equipment 2015/863/EU

The following harmonized standards were applied:

EN 60335-1:2020-08 Household and similar electrical appliances - Safety - Part 1: General requirements

EN IEC 60309-1:2023-06 Plugs, socket-outlets and couplers for industrial purposes - Part 1: General requirements

EN 61058-1-1:2017-02 Switches for appliances - Part 1: General requirements

EN 60335-2-2:2014-11 Household and similar electrical appliances - Safety - Part -2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances.

EN ISO 3744:2011-02 - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane.

EN ISO 12100:2011-03 Safety of machinery - General principles for design - Risk assessment and risk reduction

Name and address of the person authorized to compile the technical file:

Kilian Stürmer, phone: +49 (0) 951 96555 - 800

Kilian Stürmer (CEO, General Manager)
Hallstadt, 2023-11-07

Index

C
Copyright 15
E
Electrical connection 9
I
Inspection deadlines 8
L
Liability claims for defects 15
M
Malfunctions 14
S
Safety
instructions 4
T
Technical specification
Electrical connection 9
Emissions 9
Transport 11
W
Warranty 15